

FOUNDATION LAYOUT

(ALL DIMENSIONS TYPICAL FOR BENTS

DIMENSIONS LOCATING PILES AND DRILLED PIERS ARE SHOWN TO CENTER LINES OF PILES AND DRILLED PIERS.

FOUNDATION NOTES:

PILES FOR END BENT 1 SHALL BE DRIVEN TO A MINIMUM BEARING CAPACITY OF 530 KN EACH.

STEEL PILE POINTS ARE REQUIRED FOR PILES AT END BENT 1. SEE SPECIAL PROVISION FOR STEEL PILE POINTS.

WHEN DRIVING PILES, THE MAXIMUM BLOW COUNT SHALL NOT BE EXCEEDED.
THE DRILLED PIERS HAVE BEEN DESIGNED FOR BOTH SKIN FRICTION AND

TIP BEARING. THE REQUIRED TIP BEARING CAPACITY IS 2900 kPd.

THE REQUIRED TIP BEARING CAPACITY AT ALL BENTS SHALL BE VERIFIED.

DRILLED PIERS FOR BENTS 1 THROUGH 8 HAVE BEEN DESIGNED FOR AN APPLIED

LOAD OF 3727 KN EACH AT THE TOP OF THE COLUMN.

PERMANENT STEEL CASING IS REQUIRED FOR ALL BENT DRILLED PIERS AND THE CASING SHALL NOT EXTEND BELOW ELEVATION 493.0 WITHOUT THE ENGINEER'S PERMISSION.

FOR PERMANENT STEEL CASING, SEE SPECIAL PROVISIONS FOR DRILLED PIERS.

DRILLED PIERS AT THE BENTS LISTED SHALL EXTEND TO AN ELEVATION NO HIGHER THAN THAT LISTED FOR THE BENT, SATISFY THE REQUIRED TIP BEARING CAPACITY.

THAN THAT LISTED FOR THE BENTS LISTED SHALL EXTEND TO AN ELEVATION NO HIGHER THAN THAT LISTED FOR THE BENT, SATISFY THE REQUIRED TIP BEARING CAPACITY, AND HAVE THE MINIMUM PENETRATION INTO ROCK LISTED FOR THE BENT AS DEFINED BY THE DRILLED PIERS SPECIAL PROVISION.

BENT	B-1	B-2	B-3	B-4	B-5	B-6	B-7	B-8	EB-2
TIP ELEV.(M)	490.0	490.0	490.0	491.0	491.0	489.0	489.5	489.5	491.0
MIN. PENET. (M)	3.5	3.25	3.75	2.0	1.75	3.5	3.25	3.5	3.0

FOR DRILLED PIERS, SEE SPECIAL PROVSIONS.

DRILLED PIERS FOR END BENT 2 HAVE BEEN DESIGNED FOR AN APPLIED LOAD OF 1434 KN EACH AT THE TOP OF THE COLUMN.

PERMANENT STEEL CASING IS REQUIRED FOR THE DRILLED PIERS AT END BENT 2 AND THE CASING SHALL NOT EXTEND BELOW ELEVATION 493.5 WITHOUT THE ENGINEER'S PERMISSION.

DRILLED PIERS AT END BENT 2 SHALL EXTEND TO AN ELEVATION NO HIGHER THAN 491.0 AND SATISFY THE REQUIRED TIP BEARING CAPACITY AS DEFINED BY THE DRILLED PIERS SPECIAL PROVISION.

SPT TESTING IS NOT REQUIRED TO DETERMINE THE TIP BEARING CAPACITY OF THE DRILLED PIERS AT BENTS 1 THROUGH 8 AND END BENT 2.

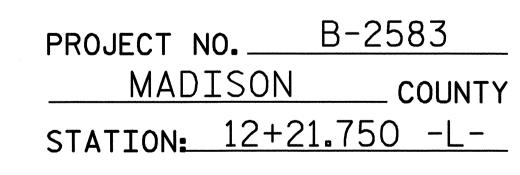
SLURRY CONSTRUCTION SHALL NOT BE USED FOR THIS PROJECT.

SID INSPECTIONS ARE NOT REQUIRED TO DETERMINE THE BOTTOM CLEANLINESS OF THE DRILLED PIERS AT BENTS 1 THROUGH 8 AND END BENT 2.

CSL TUBES ARE REQUIRED AND CSL TESTING MAY BE REQUIRED FOR THE DRILLED PIERS AT END BENT 2 AND BENTS 1 THROUGH 8. SEE SPECIAL PROVISION FOR CROSSHOLE SONIC LOGGING.

THE SCOUR CRITICAL ELEVATION FOR ALL BENTS IS ELEVATION 493.0. THE SCOUR CRITICAL ELEVATIONS ARE FOR USE BY MAINTENANCE FORCES TO MONITOR POSSIBLE SCOUR PROBLEMS DURING THE LIFE OF THE STRUCTURE.

PERMANENT STEEL CASING SHALL BE UNPAINTED.



SHEET 2 OF 6

14855

: NOINEER

DEPARTMENT OF TRANSPORTATION
RALEIGH

GENERAL DRAWING
FOR BRIDGE OVER FRENCH BROAD
RIVER BETWEEN SR 1001 AND
US 25 / US 70 BUS

			ISION:			
		SHEET NO.				
NO.	BY:	DATE:	NO.	BY:	DATE:	S-2
1			3			TOTAL SHEETS
2			4			112

DRAWN BY: E.G.ALLEN DATE: 7/22/04 CHECKED BY: W.S. ARAFAT DATE: 8/11/04

STR₋#1